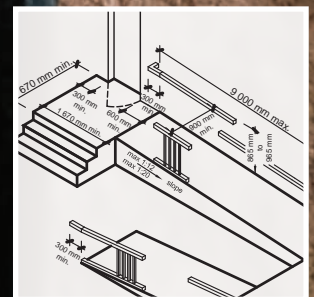


BASED ON THE ONTARIO BUILDING CODE, 2012, O. REG. 332/12



GUIDE FOR USERS

This barrier-free guide is one in a series of guides that help explain the Ontario Building Code requirements for Small and Large category buildings. This particular guide provides an interpretation of Section 3.8. of the Ontario Building Code that relates to the design and construction of the barrier-free components for a building. In addition to the text, illustrations are provided to assist with the interpretation of the Building Code provisions. It is intended to benefit designers, builders, inspectors, site superintendents, technology students and other industry stakeholders.

The information reflected in this Guide is primarily with respect to the minimum requirements in the Ontario Building Code for residential, industrial, commercial and institutional buildings applicable to Parts 3 and 9 of the Building Code. It is not applicable to most housing types such as detached or semi-detached residential buildings. This Guide is organized into three parts.

Part 1 Explanations and Illustrations of the Building Code Barrier-Free Requirements is organized to reflect the relevant Articles of Part 3, 9 and 11 of the Building Code. In addition, this part of the Guide provides explanations and illustrations of the Building Code barrier-free design and construction requirements.

Part 2 Overview of Barrier-Free Requirements: contains an overview of amending Ontario Regulations 368/13 and 191/14 introducing new accessibility (barrier-free) requirements in the Ontario Building Code in effect January 1, 2015 rewritten in plain English to aid in comprehension. The amendments will substantially alter how new and extensively renovated buildings must be designed. Use this overview as a commentary to the Building Code but always refer to the Building Code itself in Part 1 when planning new construction or renovations.

Part 3 Other Relevant Legislation has been provided as a convenient reference that could have an impact on your design and construction decisions:

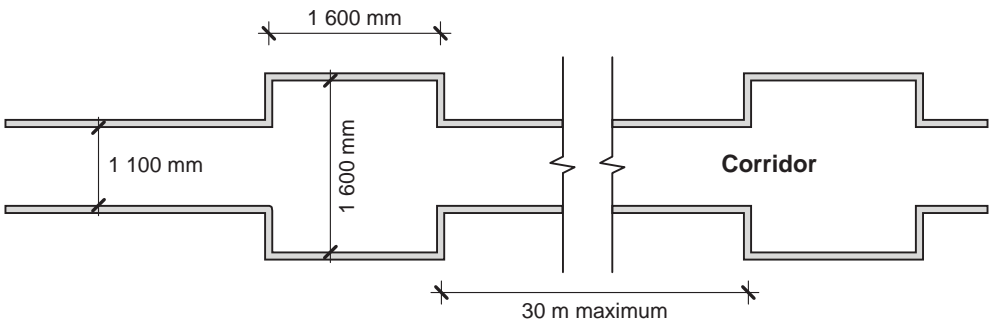
- Ontarians with Disabilities Act, 2001
- Accessibility for Ontarians with Disabilities Act, 2005
- Ontario Human Rights Code
- O. Reg. 429/07 Accessibility Standards for Customer Service
- O. Reg. 430/07 Exemption from Reporting Requirements
- O. Reg. 191/11 Integrated Accessibility Standards

EXPLANATIONS AND ILLUSTRATIONS OF THE BUILDING CODE BARRIER-FREE DESIGN REQUIREMENTS

INTRODUCTION

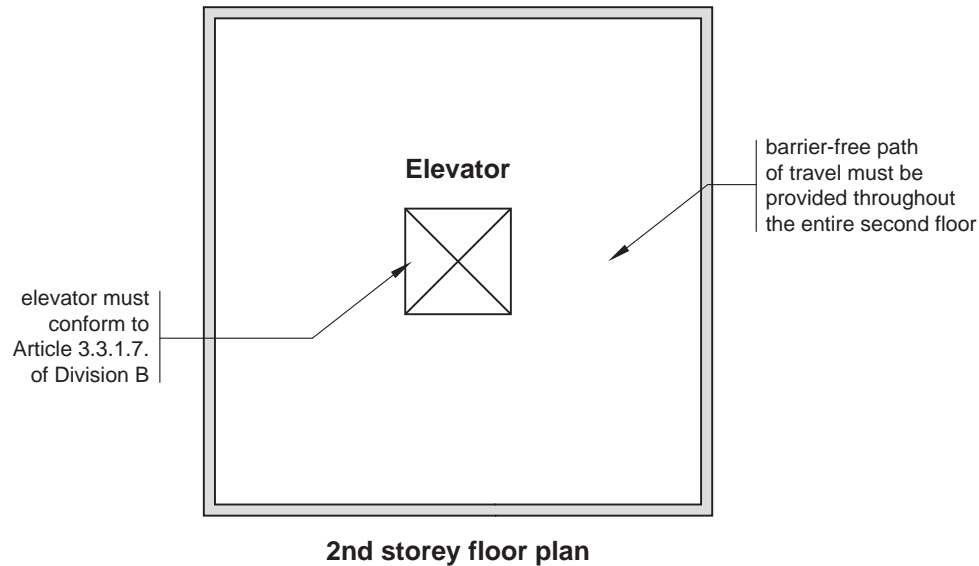
The barrier-free provisions in the Building Code are intended to ensure that persons using a manual wheelchair or other manual mobility assistance device can enter, circulate, use facilities within the building, and exit a building without the assistance of another person. The following pages contain the relevant portions of Parts 3, 9 and 11 of Division B applicable to Section 3.8. barrier-free design with interpretive notes and explanatory diagrams.

To understand the format of this guide, please review the example on the next page.

<p>Ontario Building Code 2012 Requirement</p>	<p>(4) Every <i>barrier-free</i> path of travel less than 1 600 mm in width shall be provided with an unobstructed space not less than 1 600 mm in width and 1 600 mm in length located not more than 30 m apart.</p>
<p>Explanatory Note and Diagram for Ontario Building Code 2012 Requirement</p>	<p>The minimum width requirements in Sentence 3.8.1.3.(1) do not permit two persons using wheelchairs or other mobility device to pass each other. Additionally, where the barrier-free path of travel is long, the minimum width would also require the same persons to wait an excessively long time to complete the passage along the barrier-free path of travel.</p> <p>See Figure 2-8.</p>  <p>3.8.1.3. Barrier-Free Path of Travel</p> <p>Figure 2-8 A barrier-free path of travel should not be less than 1 100 mm wide with spaces 1 600 mm x 1 600 mm spaced not more than 30 m apart.</p>

Floor areas with a barrier-free path of travel may require additional protection as persons with physical or sensory disabilities may require additional time or assistance in evacuating or moving to a safe place in an emergency, such as a fire.

See Figure 2-2



9.5.2.2. Protection on Floor Areas with a Barrier-Free Path of Travel

Figure 2-2 A barrier-free path of travel must be provided to any floor served by an elevator. The elevator must conform to Article 3.3.1.7. of Division B.

However, in residential occupancies, the requirements above are waived if a balcony conforming to the requirements below is provided for each suite, except for suites on the storey containing the barrier-free entrance described in Article 3.8.1.2. In addition, the requirements above are waived when the building is sprinklered.

Where a balcony is used as required in Sentence 3.3.1.7.(2), it must have the proper configuration so that a person using a wheelchair or other mobility device is not delayed in moving to the balcony in an emergency situation.

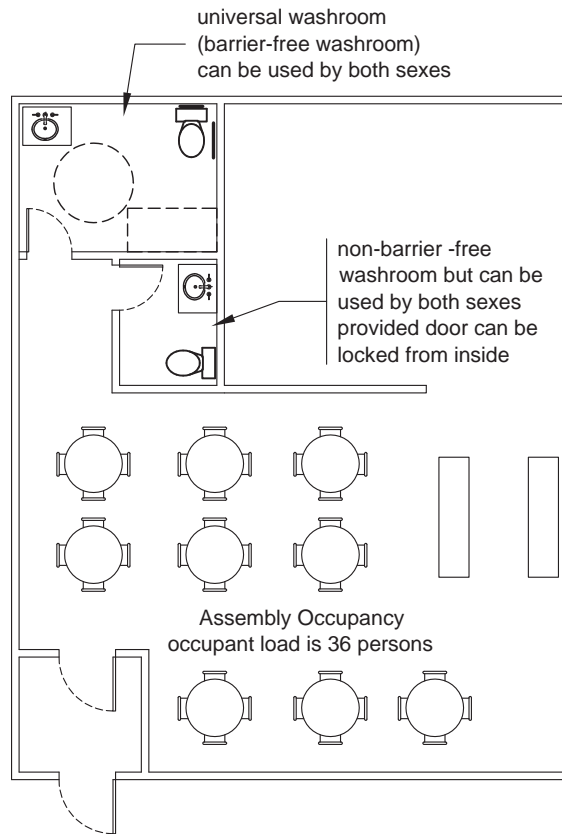
3.3.4. Residential Occupancy

3.3.4.9. Stud Wall Reinforcement

(1) If wood wall studs or sheet steel wall studs enclose the main bathroom in a *dwelling unit*, reinforcement shall be installed to permit the future installation of the following:

- (a) for a water closet, a grab bar described in Clauses 3.8.3.8.(3)(a) and a grab bar described in Clause 3.8.3.8.(3)(c),
- (b) for a shower, a grab bar described in Clause 3.8.3.13.(2)(f), and
- (c) for a bathtub, a grab bar described in Clause 3.8.3.13.(4)(c).

Blocking required for shower and bathtub in main bathroom.



Plan

Example: Table 3.7.4.3.A where number of persons of each sex is 1-25 the minimum number of water closets per sex is one. Therefore one universal washroom and one regular washroom to be used by both sexes is required.

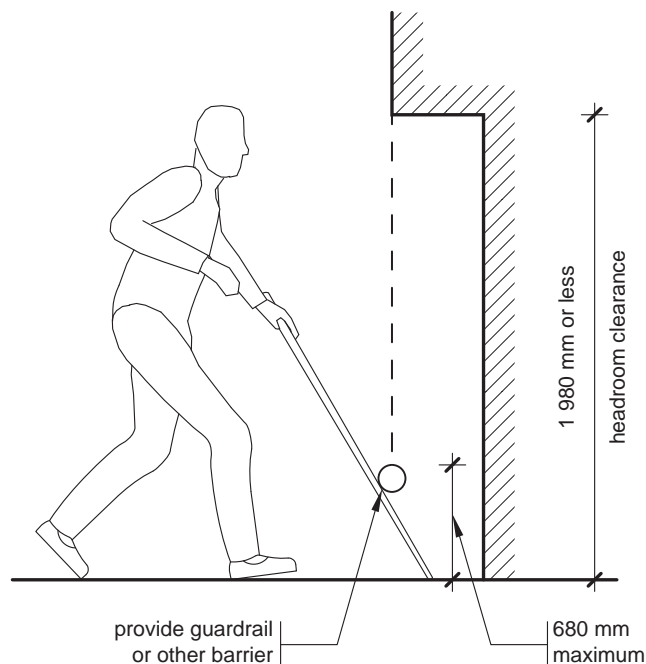
3.7.4.2. Plumbing Fixtures General (Universal Washroom)

Figure 3.7.4.2. A universal washroom maybe used to meet the requirements for barrier-free design requirements and provide sufficient number of water closets for Section 3.7. Therefore, where one water closet is required for males and one water closet is required for females, the following may be provided in lieu of the water closets otherwise required by this situation:

- one universal washroom conforming to Sentence 3.8.3.12.(1), and
- one washroom containing one water closet that is permitted to be used by both sexes provided the door to the room can be locked from the inside.

(5) Where the headroom of an area in a *barrier-free* path of travel is reduced to less than 1 980 mm, a guardrail or other barrier with its leading edge at or below 680 mm from the finished floor shall be provided.

Visually impaired persons must be guided away from locations with reduced headroom.
See Figure 2-9.



3.8.1.3. Barrier-Free Path of Travel

Figure 2-9 Where headroom is reduced to less than 1 980 mm, a guard or other barrier with its leading edge at or below 680 mm from the floor must be provided for the visually impaired.

(6) A normally occupied *floor area* that is not required by Article 3.8.2.1. to have a *barrier-free* path of travel shall meet the following requirements:

(a) interior walking surfaces throughout the normally occupied *floor area* shall comply with Clauses (2)(a) to (e), and

(b) where the headroom of an area in a corridor or aisle in the normally occupied *floor area* is reduced to less than 1 980 mm, a guardrail or other barrier with its leading edge at or below 680 mm from the finished floor shall be provided.

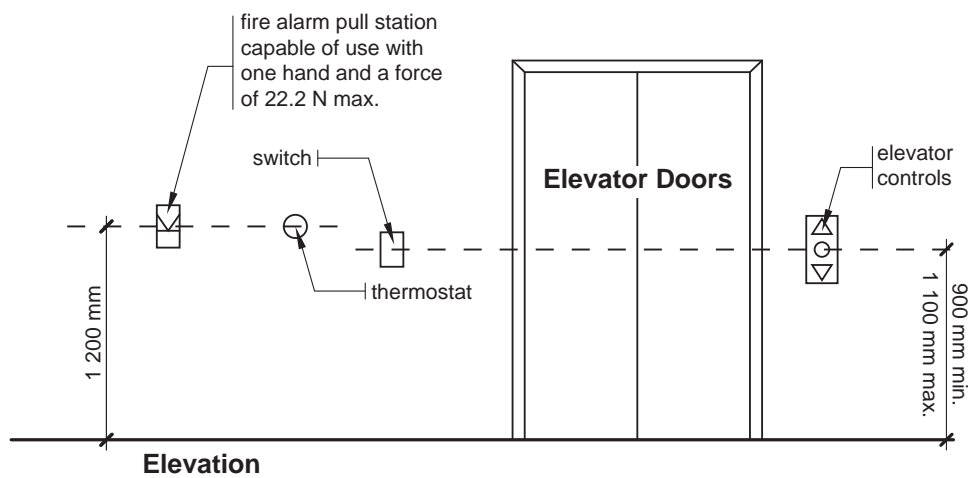
3.8.1.5. Controls

(1) Except as required by Sentences 3.5.2.2.(1) and 3.8.3.5.(1) for elevators and Sentence 3.8.3.3.(17) for power door operator controls, controls for the operation of *building* services or safety devices, including electrical switches, thermostats and intercom switches, intended to be operated by the occupant and located in a *barrier-free* path of travel shall,

- (a) be accessible to a person in a wheelchair using a side approach,
- (b) be operable,
 - (i) using one hand and with a force of not more than 22.2 N, in the case of a manual pull station, and
 - (ii) using a closed fist and with a force of not more than 22.2 N, in the case of all other controls, and
- (c) be mounted,
 - (i) 1 200 mm above the finished floor, in the case of a thermostat or a manual pull station, and
 - (ii) not less than 900 mm and not more than 1 100 mm above the finished floor, in the case of all other controls.

Persons using a wheelchair or other mobility device must be able to operate crucial building controls without the assistance of another person and using side approach.

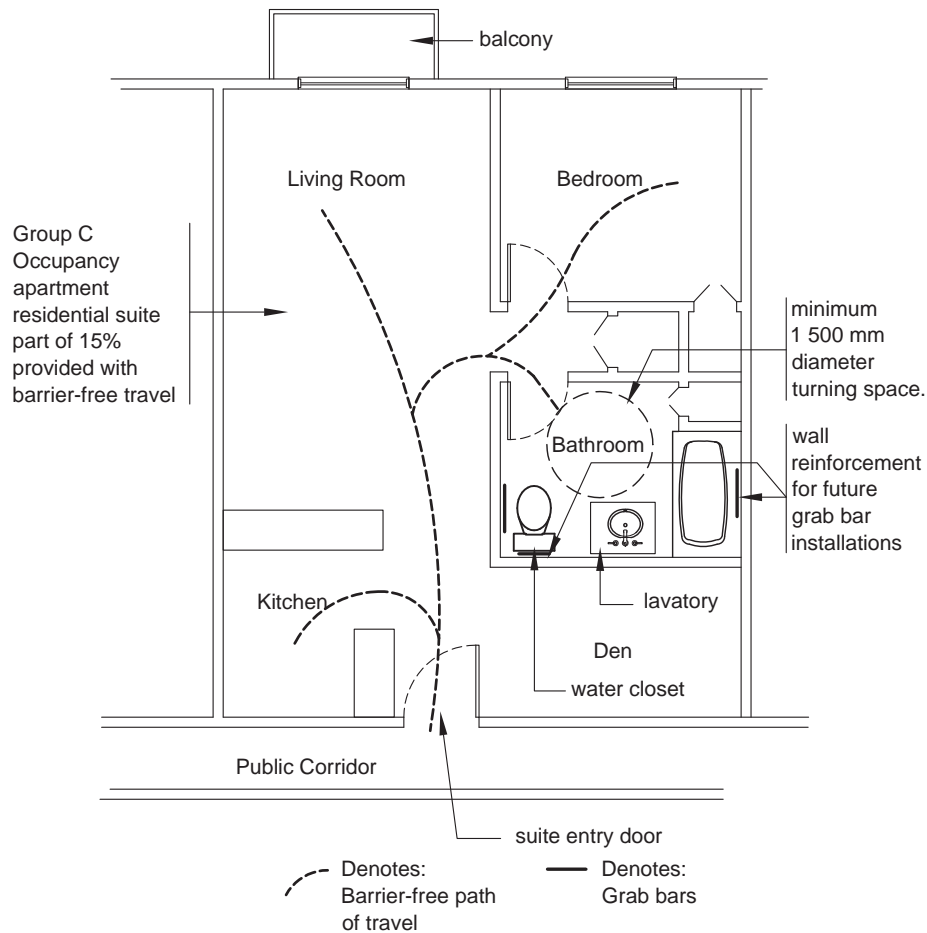
See Figure 2-11A.



3.8.1.5. Controls

Figure 2-11A Controls for the operation of a thermostat or manual pull station shall be mounted with their centreline at 1 200 mm above the floor and between 900 mm and 1 100 mm for all other controls. Except for manual pull stations, all controls must be operable using a closed fist with a force of 22.2 N maximum.

(2) A signal intended for the public to indicate the operation of a *building* security system that controls access to a *building* shall consist of an audible and visual signal.



Plan

3.8.2.1. Area Requires Barrier-Free Path of Travel

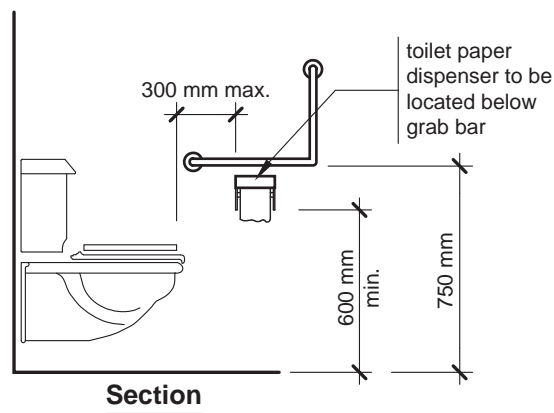
Figure 2-13DA In a Group C major occupancy apartment building, not less than 15% of all residential suites must be provided with a barrier-free path of travel from the suite entrance door into the following rooms or spaces that must be located at the same level as the barrier-free path of travel. Note that now a bathroom must have a 1 500 mm turning radius and not just a minimum area.

- Kitchen or kitchen space
- Living room or living space
- Bedroom
- Bathroom

3.8.3.9. Water Closets

- (1) A water closet described in Clause 3.8.3.8.(1)(c) or (10)(c) or 3.8.3.12.(1)(d) shall,
 - (a) be equipped with a seat located at not less than 430 mm and not more than 485 mm above the finished floor,
 - (b) be equipped with hand-operated flushing controls that are easily accessible to a wheelchair user or be automatically operable,
 - (c) be equipped with a back support where there is no seat lid or tank, and
 - (d) not have a spring-activated seat.
- (2) Hand-operated flushing controls required by Clause (1)(b) shall be operable using a closed fist and with a force of not more than 22.2 N.

Persons using a wheelchair or with a physical disability must be able to use a water closet without the assistance from another individual.
See Figure 2-32A.



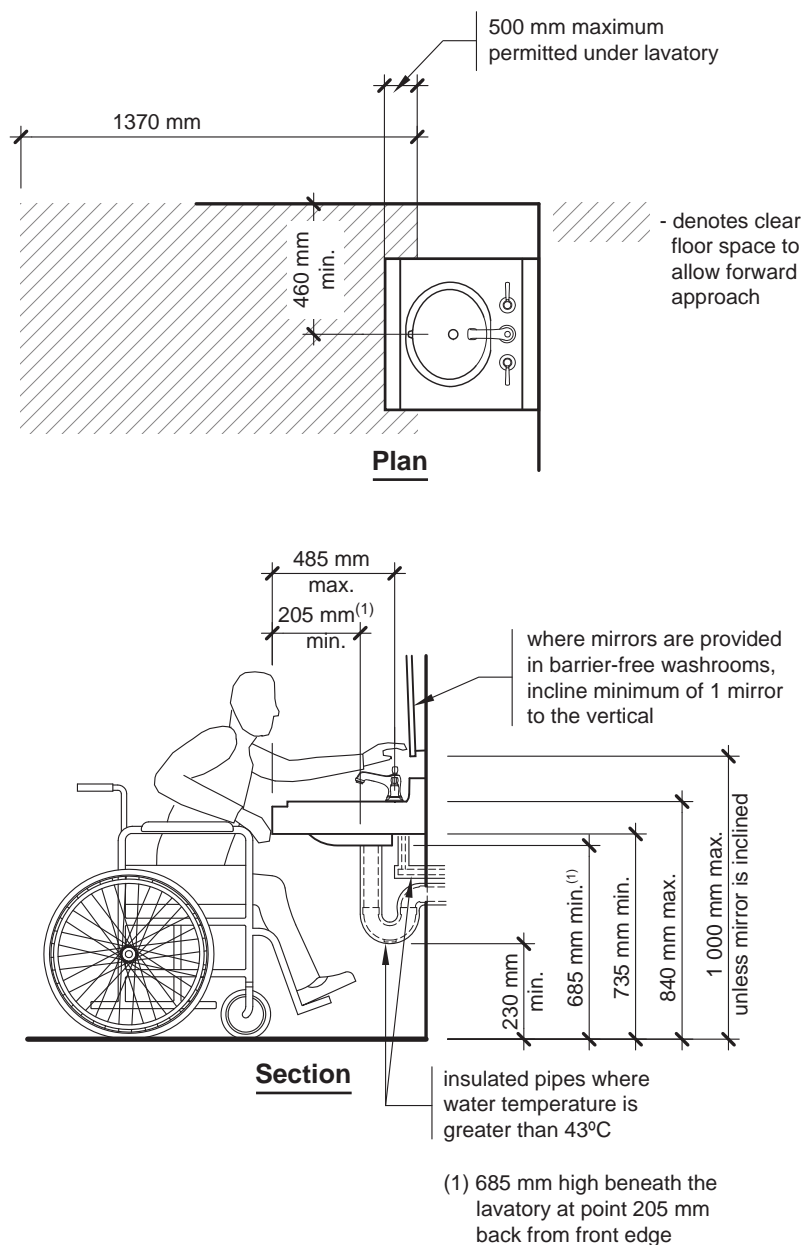
3.8.3.8. Water Closet Stalls

Figure 2-32A Toilet paper dispenser located below grab bar.

(5) A washroom described in Sentence 3.8.2.3.(6) shall be provided with a lavatory conforming to Clauses (1)(e), (g) and (h).

Persons using a wheelchair or other mobility device must be able to use a lavatory or access other accessories in a barrier-free washroom without the assistance from another individual.

See Figures 2-33AA and 2-33BA.



3.8.3.11. Lavatories

Figure 2-33AA Location, height and clearance to lavatories.

OVERVIEW OF BARRIER-FREE REQUIREMENTS: O. REG. 332/12

SCOPE

Section 3.8. of Division B of the Building Code provides the minimum provisions necessary for persons using a wheelchair or other mobility assistance device and persons with sensory disabilities to be able to function properly using a building. The minimum provisions are referred to as “barrier-free design”.

This manual covers the barrier-free design requirements required for the construction of all new buildings and additions to buildings. It does not cover the barrier-free requirements for public pools and spas under Division B Sections 3.11. and 3.12. of Division B respectively. Also, rapid transit stations of Division B, Section 3.13. are not included in this manual.

DEFINITIONS

Adaptable seating means a fixed seat or seats designed to facilitate a side transfer from a wheelchair.

Mobility assistive device means a mobility assistive device as defined in section 2 of Ontario Regulation 191/11 (Integrated Accessibility Standards) made under the *Accessibility for Ontarians with Disabilities Act, 2015* (means a cane, walker or similar aid).

Section 3.2 Building Fire Safety

3.2.4. Fire alarm and Detection Systems

3.2.4.19. Alert and Alarm Signals

To assist persons with hard of hearing, visual signal devices in a fire alarm system must be installed, in addition to audible signal devices,

- in a building or portion of a building intended for use primarily by persons with hearing impairment,
- in a public corridor serving a Group A, B, C, D or E occupancy,
- in a corridor used by the public and in a floor area or part of a floor area where the public may congregate in a Group A occupancy,
- in not less than 10% of the suites in a hotel or motel,
- in a washroom for public use such as a universal washroom, a washroom in a barrier-free path of travel, additional washrooms in excess of those provided in a barrier-free path of travel, and a washroom provided in storey not required to have a barrier-free path of travel, and
- in the living space in a suite of residential occupancy in a Group C major occupancy apartment building.

Visual signals are not required in a classroom and a Group B, Division 3 occupancy that contains sleeping accommodation for not more than 10 persons and not more than six occupants requiring assistance in evacuation in case of an emergency.

3.2.4.22. Smoke Alarms

Smoke alarms must be installed in each dwelling unit and, except for care, care and treatment or detention occupancies required to have a fire alarm system, in each sleeping room not within a dwelling unit. The smoke alarms must have a visual signaling component for a person hard of hearing, conforming to the requirements in 18.5.3. (Light, Color and Pulse Characteristics) of NFPA 72, "National Fire Alarm and Signaling Code". The visual signaling component need not be integrated with the smoke alarm as long as it is interconnected to it, be of battery backup or have synchronized flash rates, when installed in a dwelling unit. The luminous intensity for the visual signaling components installed in sleeping rooms must be a minimum of 175 cd. The SI unit of luminous intensity is candela (cd), an SI base unit.

Section 3.3 Safety Within Floor Areas

3.3.1. All Floor Areas

3.3.1.7. Protection on Floor Areas with a Barrier-Free Path of Travel

Floor areas with a barrier-free path of travel may require additional protection as persons with physical or sensory disabilities may require additional time or assistance in evacuating or moving to a

ONTARIANS WITH DISABILITIES ACT, 2001

PREAMBLE

The people of Ontario support the right of persons of all ages with disabilities to enjoy equal opportunity and to participate fully in the life of the province.

Ontarians with disabilities experience barriers to participating in the mainstream of Ontario society. The number of persons with disabilities is expected to increase as the population ages, since the incidence of disability increases with age.

The Government of Ontario is committed to working with every sector of society to build on what it has already achieved together with those sectors and to move towards a province in which no new barriers are created and existing ones are removed. This responsibility rests with every social and economic sector, every region, every government, every organization, institution and association, and every person in Ontario.

The right of persons with disabilities to equal treatment without discrimination in accordance with the *Human Rights Code* is addressed in a number of Ontario statutes and regulations. Some of these are set out below.

The *Assessment Act* provides for exemptions from property taxation where improvements, alterations or additions to existing homes or designated portions of new homes are made or built to accommodate persons with disabilities who would otherwise require care in an institution.

The *Blind Persons' Rights Act* prohibits discrimination in services, accommodation, facilities or occupancy against blind persons using guide dogs and prohibits persons who are not blind from using white canes.

The *Building Code Act, 1992* and the regulations made under it establish standards for the construction, renovation and change of use of buildings and structures, including standards related to the accessibility of buildings and structures for persons with disabilities.

As an incentive to encourage employers to hire persons with disabilities, the *Corporations Tax Act* allows employers an additional deduction for the costs of modifying buildings, structures and premises, acquiring certain equipment and providing special training in order to accommodate persons with disabilities in the workplace. The *Income Tax Act* provides a similar credit to unincorporated employers.

The *Education Act* includes provisions to address the needs of students with disabilities who have been identified as "exceptional pupils". School boards must provide special education programs and services to these students.

ACCESSIBILITY FOR ONTARIANS WITH DISABILITIES ACT, 2005

PART I: INTERPRETATION

Purpose

1. Recognizing the history of discrimination against persons with disabilities in Ontario, the purpose of this Act is to benefit all Ontarians by,

- e) developing, implementing and enforcing accessibility standards in order to achieve accessibility for Ontarians with disabilities with respect to goods, services, facilities, accommodation, employment, buildings, structures and premises on or before January 1, 2025; and
- f) providing for the involvement of persons with disabilities, of the Government of Ontario and of representatives of industries and of various sectors of the economy in the development of the accessibility standards. 2005, c. 11, s. 1.

Definitions

2. In this Act,

"accessibility standard" means an accessibility standard made by regulation under section 6; (*"norme d'accessibilité"*)

"barrier" means anything that prevents a person with a disability from fully participating in all aspects of society because of his or her disability, including a physical barrier, an architectural barrier, an information or communications barrier, an attitudinal barrier, a technological barrier, a policy or a practice; (*"obstacle"*)

"director" means a director appointed under section 30; (*"directeur"*)

"disability" means,

- a) any degree of physical disability, infirmity, malformation or disfigurement that is caused by bodily injury, birth defect or illness and, without limiting the generality of the foregoing, includes diabetes mellitus, epilepsy, a brain injury, any degree of paralysis, amputation, lack of physical co-ordination, blindness or visual impediment, deafness or hearing impediment, muteness or speech impediment, or physical reliance on a guide dog or other animal or on a wheelchair or other remedial appliance or device,

ONTARIO HUMAN RIGHTS CODE

Preamble

Whereas recognition of the inherent dignity and the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world and is in accord with the Universal Declaration of Human Rights as proclaimed by the United Nations;

And Whereas it is public policy in Ontario to recognize the dignity and worth of every person and to provide for equal rights and opportunities without discrimination that is contrary to law, and having as its aim the creation of a climate of understanding and mutual respect for the dignity and worth of each person so that each person feels a part of the community and able to contribute fully to the development and well-being of the community and the Province;

And Whereas these principles have been confirmed in Ontario by a number of enactments of the Legislature and it is desirable to revise and extend the protection of human rights in Ontario;

Therefore, Her Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

PART I FREEDOM FROM DISCRIMINATION

Services

1. Every person has a right to equal treatment with respect to services, goods and facilities, without discrimination because of race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, sex, sexual orientation, gender identity, gender expression, age, marital status, family status or disability. R.S.O. 1990, c. H.19, s. 1; 1999, c. 6, s. 28 (1); 2001, c. 32, s. 27 (1); 2005, c. 5, s. 32 (1); 2012, c. 7, s. 1.

Accommodation

2. (1) Every person has a right to equal treatment with respect to the occupancy of accommodation, without discrimination because of race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, sex, sexual orientation, gender identity, gender expression, age, marital status, family status, disability or the receipt of public assistance. R.S.O. 1990, c. H.19, s. 2 (1); 1999, c. 6, s. 28 (2); 2001, c. 32, s. 27 (1); 2005, c. 5, s. 32 (2); 2012, c. 7, s. 2 (1).

Harassment in accommodation

(2) Every person who occupies accommodation has a right to freedom from harassment by the landlord or agent of the landlord or by an occupant of the same building because of race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, sexual orientation, gender identity, gender expression, age, marital status, family status, disability or the receipt of public assistance. R.S.O. 1990, c. H.19, s. 2 (2); 1999, c. 6, s. 28 (3); 2001, c. 32, s. 27 (1); 2005, c. 5, s. 32 (3); 2012, c. 7, s. 2 (2).

Contracts

3. Every person having legal capacity has a right to contract on equal terms without discrimination because of race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, sex, sexual orientation,

ONTARIO REGULATION 429/07

ACCESSIBILITY STANDARDS FOR CUSTOMER SERVICE

Purpose and application

1. (1) This Regulation establishes accessibility standards for customer service and it applies to every designated public sector organization and to every other person or organization that provides goods or services to members of the public or other third parties and that has at least one employee in Ontario. O. Reg. 429/07, s. 1 (1).

(2) In this Regulation,

“designated public sector organization” means the Legislative Assembly and the offices of persons appointed on the address of the Assembly, every ministry of the Government of Ontario, every municipality and every person or organization listed in Schedule 1 or described in Schedule 2 to this Regulation; (*“organisation désignée du secteur public”*)

“provider of goods or services” means a person or organization to whom this Regulation applies. (*“fournisseur de biens ou de services”*) O. Reg. 429/07, s. 1 (2).

Effective dates

2. The accessibility standards for customer service apply to the designated public sector organizations on and after January 1, 2010 and to other providers of goods or services on and after January 1, 2012. O. Reg. 429/07, s. 2.

Establishment of policies, practices and procedures

3. (1) Every provider of goods or services shall establish policies, practices and procedures governing the provision of its goods or services to persons with disabilities. O. Reg. 429/07, s. 3 (1).

(2) The provider shall use reasonable efforts to ensure that its policies, practices and procedures are consistent with the following principles:

- 4) The goods or services must be provided in a manner that respects the dignity and independence of persons with disabilities.
- 5) The provision of goods or services to persons with disabilities and others must be integrated unless an alternate measure is necessary, whether temporarily or on a permanent basis, to enable a person with a disability to obtain, use or benefit from the goods or services.
- 6) Persons with disabilities must be given an opportunity equal to that given to others to obtain, use and benefit from the goods or services. O. Reg. 429/07, s. 3 (2).

ONTARIO REGULATION 430/07

EXEMPTION FROM REPORTING REQUIREMENTS

Re accessibility standards for customer service

1. (1) Every provider of goods or services that has fewer than 20 employees, other than a designated public sector organization, is exempted from the requirement to file accessibility reports under section 14 of the Act with respect to the accessibility standards for customer service established by Ontario Regulation 429/07 (Accessibility Standards for Customer Service) made under the Act. O. Reg. 430/07, s. 1 (1).

(2) The following are the reasons for this exemption:

- 6) It is consistent with a phased approach to implementing the Act.
- 7) It allows the exempted providers of goods or services to focus their efforts and resources on complying with those accessibility standards. O. Reg. 430/07, s. 1 (2).

(3) In this section, “designated public sector organization” and “provider of goods or services” have the same meaning as in Ontario Regulation 429/07. O. Reg. 430/07, s. 1 (3).

2. OMITTED (PROVIDES FOR COMING INTO FORCE OF PROVISIONS OF THIS REGULATION).
O. Reg. 430/07, s. 2.

ONTARIO REGULATION 191/11 INTEGRATED ACCESSIBILITY STANDARDS

PART I: GENERAL

Purpose and application

1. (1) This Regulation establishes the accessibility standards for each of information and communications, employment, transportation and the design of public spaces. O. Reg. 413/12, s. 1.

(2) The requirements in the standards set out in this Regulation are not a replacement or a substitution for the requirements established under the *Human Rights Code* nor do the standards limit any obligations owed to persons with disabilities under any other legislation. O. Reg. 191/11, s. 1 (2).

(3) Except as otherwise provided in this Regulation, this Regulation applies to the Government of Ontario, the Legislative Assembly, every designated public sector organization and to every other person or organization that provides goods, services or facilities to the public or other third parties and that has at least one employee in Ontario. O. Reg. 191/11, s. 1 (3).

Definitions

2. In this Regulation,

“accessible formats” may include, but are not limited to, large print, recorded audio and electronic formats, braille and other formats usable by persons with disabilities; (*“format accessible”*)

“communication supports” may include, but are not limited to, captioning, alternative and augmentative communication supports, plain language, sign language and other supports that facilitate effective communications; (*“aides à la communication”*)

“designated public sector organization” means every municipality and every person or organization listed in Column 1 of Table 1 of Ontario Regulation 146/10 (Public Bodies and Commission Public Bodies — Definitions) made under the *Public Service of Ontario Act, 2006* or described in Schedule 1 to this Regulation; (*“organisation désignée du secteur public”*)

“Government of Ontario” includes the executive of the government and operational branches, including every ministry of the Government of Ontario and the Office of the Premier; (*“gouvernement de l’Ontario”*)